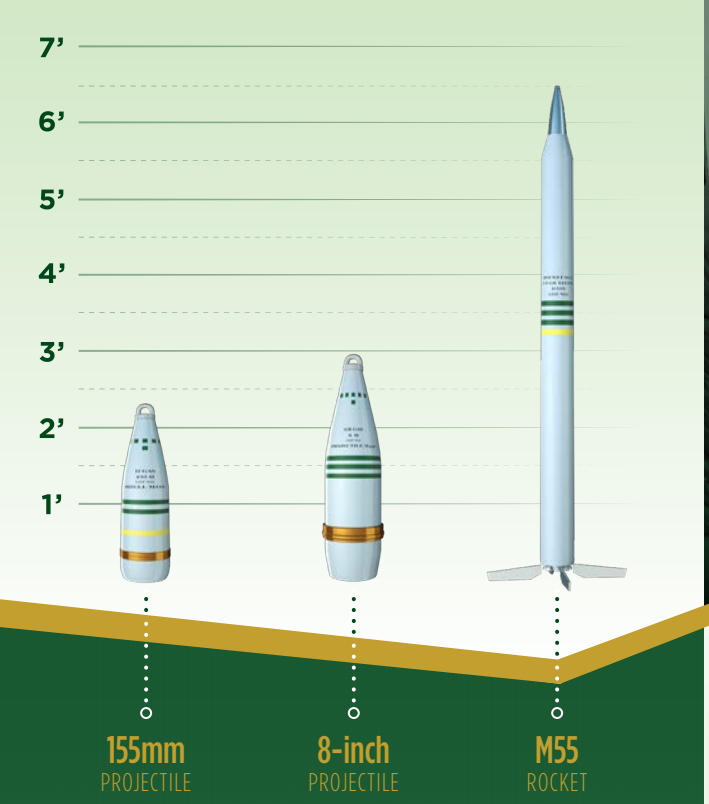

BLUE GRASS ARMY DEPOT

Built in 1941 with operations beginning in 1942, the Blue Grass Army Depot is a U.S. Army storage facility for conventional and chemical weapons, among other missions.

A tenant organization, the Blue Grass Chemical Activity, is responsible for safely and securely storing and monitoring the chemical weapons stockpile. The depot stores three types of chemical munitions: 155mm projectiles, 8-inch projectiles and M55 rockets.

FOR MORE INFORMATION:

Blue Grass Chemical Stockpile Outreach Office

(859) 626-8944

1000 Commercial Drive, Suite 2
Richmond, KY 40475
8:30 a.m. – 5 p.m., Monday – Friday
(Closed federal holidays)
email: bgoutreach@iem.com

Bechtel Parsons Blue Grass Public Communications
(859) 625-1291

Blue Grass Army Depot Public Affairs
(859) 779-6941

Blue Grass Chemical Activity Public Affairs
(859) 779-6897

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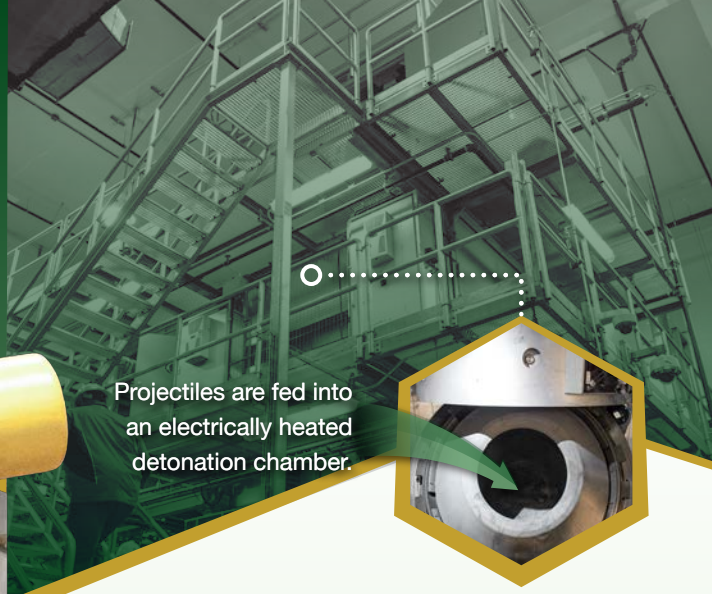
www.peoacwa.army.mil

BGCAPP

Blue Grass Chemical Agent-Destruction Pilot Plant

Destroying the Chemical Weapons Stockpile in Kentucky



Projectiles are fed into an electrically heated detonation chamber.

OVERVIEW

The mission of the Blue Grass Chemical Agent-Destruction Pilot Plant, or BGCAPP, is to safely and efficiently destroy the chemical weapons stockpile at the Blue Grass Army Depot near Richmond, Kentucky.

Since the 1940s, the depot has safely stored chemical weapons: projectiles containing mustard agent and projectiles and rockets containing nerve agents, GB and VX. The U.S. Department of Defense's Program Executive Office, Assembled Chemical Weapons Alternatives is responsible for safely destroying these weapons, thereby eliminating the risk associated with continued storage. The safety of the workforce, neighboring communities and the environment is the program's top priority.

DESTRUCTION TECHNOLOGIES

The Blue Grass plant uses neutralization followed by supercritical oxidation, known as SCWO, to destroy the nerve agent stockpile. Extensively trained and skilled workers and state-of-the-art robotic systems ensure the safe destruction of the stockpile.

NEUTRALIZATION OF AGENT – Robotic equipment disassembles the munitions and the nerve agent is drained and separated from the explosive components. The agent is neutralized with hot water and a high pH caustic solution. The product is called hydrolysate.

SUPERCRITICAL WATER OXIDATION – SCWO blends water, fuel, air and hydrolysate together in a specialized vessel at temperatures and pressure conditions above the critical point of water. Water is recycled in the plant and the salt solution, or brine, is shipped for disposal at a permitted facility.

DISPOSING OF METAL PARTS – Metal parts are heated to 1,000 degrees Fahrenheit for 15 minutes and can then be safely recycled.

STATIC DETONATION CHAMBER

An X-ray assessment of the Blue Grass stockpile determined that a number of projectiles contained solidified mustard agent and therefore could not be easily processed by the plant's automated equipment. As a result, an Explosive Destruction Technology facility was built to destroy the mustard agent stockpile using a Static Detonation Chamber, or SDC. A second, larger SDC will also be placed at the Blue Grass plant. Both SDCs will augment the plant to destroy drained rocket warheads and overpacked M55 rockets.

THERMAL DECOMPOSITION – High heat deflagrates or detonates the projectiles and the mustard agent and energetics are destroyed by thermal decomposition. Off-gases are treated by an air pollution abatement system.

DISPOSING OF METAL PARTS – Metal parts are safely recycled.

EXPERIENCED TEAM

In 2003, Bechtel Parsons Blue Grass was chosen as the systems contractor to design, construct, systemize, operate and close BGCAPP. The Bechtel Parsons Blue Grass team is a joint venture of Bechtel National Inc. and Parsons Government Services Inc. Their teaming partners include Amentum, Battelle Memorial Institute, and GP Strategies Corporation.